

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An electron beam lithography apparatus for concentrically drawing a plurality of circles on a substrate by applying an electron beam while rotating the substrate, comprising:

a beam deflection portion for deflecting the electron beam to change an irradiation position of the electron beam;

a synchronization signal generation portion for generating a synchronization signal in synchronization with the rotation of the substrate;

a controller for controlling the beam deflection portion on the basis of the synchronization signal in order to deflect the electron beam in a rotational radial direction of the substrate and in a rotational tangential direction of the substrate relative to the circle path and in the same ~~opposite to a~~ rotational direction of the substrate, while drawing transition is performed from one circle to another circle; and

a beam cutoff portion for cutting off the irradiation of the electron beam on the substrate, for a period when the electron beam is deflected in the rotational radial direction.

2. (Currently Amended) The electron beam lithography apparatus according to claim 1, wherein the controller deflects the electron beam in the rotational tangential direction of the substrate relative to the circle path and in ~~being~~ the same direction as the movement of the substrate before drawing transition is performed from the one circle to the another circle.

3. (Currently Amended) The electron beam lithography apparatus according to claim 1, wherein the controller deflects the electron beam in the rotational tangential direction relative to the circle path to overwrite a portion of the circle including a drawing connection position.

4. (Original) The electron beam lithography apparatus according to claim 1, wherein the beam cutoff section varies an intensity of the electron beam applied to the substrate at a predetermined rate before or after a period when the electron beam is deflected in the rotational radial direction.

5. (Currently Amended) An electron beam lithography method for drawing a plurality of circles on a substrate by applying an electron beam while rotating the substrate, the method comprising:

a transition controlling step of deflecting the electron beam in a rotational radial direction of the substrate and in a rotational tangential direction of the substrate relative to the circle path and in the same ~~opposite to~~ a rotational direction of the substrate, upon performing drawing transition from one circle to another circle; and

a beam cutoff step of cutting off the irradiation of the electron beam on the substrate, for a period when the electron beam is deflected in the rotational radial direction.

6. (Currently Amended) The electron beam lithography method according to claim 5, wherein the transition controlling step includes a step of deflecting the electron beam in the rotational tangential direction of the substrate relative to the circle path and in being the same direction as the movement of the substrate before drawing transition is performed from the one circle to the another circle ~~is performed~~.

7. (Currently Amended) The electron beam lithography method according to claim 5, wherein the transition controlling step deflects the electron beam in the

rotational tangential direction relative to the circle path to overwrite a portion of the circle including a drawing connection position.

8. (Original) The electron beam lithography method according to claim 5, comprising the step of varying an intensity of the electron beam applied to the substrate at a predetermined rate before or after a period when the electron beam is deflected in the rotational radial direction.

9. (Currently Amended) An apparatus comprising a drawing controller for applying an electron beam on a substrate to draw a plurality of circles, configured for deflecting the electron beam in a rotational radial direction of the substrate and in a rotational tangential direction of the substrate relative to the circle path and in the same ~~opposite to a~~ rotational direction of the substrate, upon performing drawing transition from one circle to another circle.

10. (Previously Presented) The apparatus recited in claim 9, wherein the drawing controller is further configured for cutting off the irradiation of the electron beam on the substrate, for a period when the electron beam is deflected in the rotational radial direction.

11. (Currently Amended) The apparatus recited in claim 9, wherein before the drawing transition from the one circle to the another is performed, the electron beam is deflected in the rotational tangential direction of the substrate relative to the circle path and in the same rotational direction of the substrate.

12. (Currently Amended) The apparatus recited in claim 9, wherein the drawing controller is configured for deflecting the electron beam in the rotational tangential

direction relative to the circle path to overwrite a portion of the circle including a drawing connection position.

13. (Previously Presented) The apparatus recited in claim 9, wherein the drawing controller is configured for varying an intensity of the electron beam applied to the substrate at a predetermined rate before or after a period when the electron beam is deflected in the rotational radial direction.